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A method for determining the location of an object in a passenger compartment of a vehicle in which ultrasonic waves are transmitted from a first transducer into the passenger compartment, waves reflected off an object in the passenger compartment are received by the first transducer and a first distance from the first transducer to the object is calculated based on the time difference between the transmitted waves and reflected waves when received by the first transducer. Further, different ultrasonic waves are transmitted from a second transducer into the passenger compartment which then receives reflected waves off the object and a second distance from the second transducer to the object is calculated based on the time difference between the transmitted waves and reflected waves when received by the second transducer. The approximate location of the object in the passenger compartment is determined based on the first distance and the second distance.